

2. Overview of measurement networks of the Czech Republic

2.1 Statistical survey

Tab. mer1 Air pollution monitoring localities, based on the owner and the regions, Czech Republic, 2005

Zone / agglomeration	CHMI	ZÚ	VÚLHM	E+P	KMon	Total
Agglomeration Brno	4	3	–	–	–	7
Agglomeration Prague	15	8	–	–	–	23
Zone South Bohemian region	8	2	–	–	–	10
Zone South Moravian region	5	1	–	–	–	6
Zone Karlovy Vary region	4	3	5	1	–	13
Zone Hradec Králové region	13	1	–	–	–	14
Zone Liberec region	9	2	–	–	–	11
Agglomeration Moravian-Silesian region	22	3	–	2	1	28
Zone Olomouc region	6	1	1	–	2	10
Zone Pardubice	6	4	–	1	1	12
Zone Plzeň region	5	4	–	–	6	15
Zone Central Bohemian region	11	9	–	–	–	20
Zone Ústí nad Labem region	21	13	–	10	–	44
Zone Vysočina region	7	3	–	–	–	10
Zone Zlín region	4	2	–	–	1	7
Total	140	59	6	14	11	230

Explanatory notes:

ZÚ Health Institute [vč./incl. ZÚ Kolín (3)]

E+P energetics + industry [ČEZ (13), FP (1)]

KMon municipal monitoring [MÚ Třinec (1), Město Plzeň (6), MÚ Pardubice (1), Město Šumperk (1), Město Olomouc (1), Město Zlín (1)]

Tab. mer2 Air pollution monitoring localities measuring basic pollutants, AMS, based on the regions and the owner, Czech Republic, 2005

Zone / agglomeration	SO ₂		NO ₂ , NO _x		PM ₁₀		O ₃		CO		BTX	
	CHMI	Others	CHMI	Others	CHMI	ZÚ, MÚ Třinec, Město Plzeň, Město Zlín, Město Šumperk, Město Olomouc	CHMI	ZÚ, Město Plzeň, MÚ Pardubice, Město Zlín, Město Šumperk, Město Olomouc	CHMI	ZÚ, Město Plzeň	CHMI	Město Plzeň, MÚ Pardubice
Agglomeration Brno	2	–	2	–	2	–	2	–	1	–	1	–
Agglomeration Prague	14	–	15	–	14	–	8	–	6	7	4	–
Zone South Bohemian region	4	2	4	2	3	2	5	1	2	1	2	–
Zone South Moravian region	2	1	2	1	2	1	2	1	–	–	1	–
Zone Karlovy Vary region	4	2	4	2	4	1	2	–	2	–	1	–
Zone Hradec Králové region	5	1	5	1	5	1	5	1	1	1	1	–
Zone Liberec region	5	–	5	–	5	–	2	–	1	–	1	–
Agglomeration Moravian-Silesian region	15	3	16	3	14	2	7	–	3	–	4	–
Zone Olomouc region	4	3	4	3	4	3	3	3	1	–	1	–
Zone Pardubice	2	4	2	4	2	2	2	1	1	1	1	1
Zone Plzeň region	2	8	2	8	1	8	2	5	1	5	–	1
Zone Central Bohemian region	6	1	6	1	5	1	3	–	1	–	1	–
Zone Ústí nad Labem region	14	11	15	10	14	–	10	1	6	–	4	–
Zone Vysočina region	3	2	3	2	3	2	3	1	2	–	1	–
Zone Zlín region	2	1	2	1	2	1	2	1	1	–	1	–
Total	84	39	87	38	80	24	58	15	29	15	24	2
Total	123		125		104		73		44		26	

Explanatory notes:

Others: ZÚ, ČEZ, MÚ Třinec, Město Plzeň, MÚ Pardubice, Město Zlín, Město Šumperk, Město Olomouc

BTX Includes measurement of aromatic hydrocarbons:

benzene, toluene, ethylbenzene, o-xylene, m-xylene, p-xylene, m,p-xylene.

Note: At certain stations the above measuring programme may be limited.

Tab. mer3 Air pollution monitoring localities measuring other pollutants and supplementary quantities, AMS, based on the regions and the owner, Czech Republic, 2005

Zone / agglomeration	PM _{2,5}		NH ₃	Hg	Meteo	
	CHMI	Město Plzeň	CHMI	CHMI	CHMI	Others
Agglomeration Brno	1	–	–	–	1	–
Agglomeration Prague	4	–	–	–	6	–
Zone South Bohemian region	1	–	–	–	3	1
Zone South Moravian region	–	–	1	–	2	–
Zone Karlovy Vary region	1	–	–	–	4	1
Zone Hradec Králové region	1	–	–	–	5	–
Zone Liberec region	1	–	–	–	4	–
Agglomeration Moravian-Silesian region	5	–	–	–	14	3
Zone Olomouc region	1	–	–	–	4	–
Zone Pardubice	1	–	1	–	1	2
Zone Plzeň region	–	1	–	–	1	4
Zone Central Bohemian region	2	–	–	–	4	–
Zone Ústí nad Labem region	3	–	1	1	13	9
Zone Vysočina region	1	–	–	–	2	–
Zone Zlín region	1	–	–	–	3	–
Total	23	1	3	1	67	20
Total	24		3	1	87	

Explanatory notes:

Others: ZÚ, ČEZ, MÚ Třinec, Město Plzeň, MÚ Pardubice

Meteo Measurement of meteorological parameters:

WV - wind velocity, WD - wind direction, T10m - temperature 10 m above terrain, T2m - temperature 2 m above terrain, h - relative air humidity, p - atmospheric pressure, RAIN - precipitation amount, GLRD - global radiation

Note: At certain stations the above measuring programme may be limited.

Tab. mer4 Air pollution monitoring localities measuring basic pollutants, manual methods, based on the regions and the owner, Czech Republic 2005

Zone / agglomeration	SO ₂		NO ₂		PM ₁₀		HM		SPM		NO _x
	CHMI	Others	CHMI	ZÚ (incl. ZÚ Kolín)	CHMI	ZÚ (incl. ZÚ Kolín)	CHMI	ZÚ	CHMI	ZÚ (incl. ZÚ Kolín)	ZÚ
Agglomeration Brno	2	–	1	2	1	1	1	2	2	1	–
Agglomeration Prague	1	2	1	8	3	5	1	8	–	4	–
Zone South Bohemian region	2	–	2	–	3	–	2	1	–	–	–
Zone South Moravian region	1	–	2	–	3	–	1	1	1	–	–
Zone Karlovy Vary region	–	7	–	–	1	–	1	1	–	2	2
Zone Hradec Králové region	6	–	4	–	6	–	2	1	–	–	–
Zone Liberec region	3	–	3	–	4	2	3	2	–	–	–
Agglomeration Moravian-Silesian region	6	–	5	1	7	2	4	3	1	–	–
Zone Olomouc region	2	1	2	–	3	–	1	1	–	–	–
Zone Pardubice	5	2	4	–	5	–	2	2	1	2	2
Zone Plzeň region	2	–	2	–	3	–	1	4	–	2	–
Zone Central Bohemian region	5	4	5	6	5	8	1	6	–	3	–
Zone Ústí nad Labem region	7	8	7	6	9	7	3	7	3	2	6
Zone Vysočina region	4	1	4	–	3	–	1	3	1	1	1
Zone Zlín region	1	1	1	1	2	1	1	2	–	1	1
Total	47	26	43	24	58	26	25	44	9	18	12
Total	73		67		84		69		72		12

Explanatory notes:

Others: ZÚ (incl. ZÚ Kolín), VÚLHM, FP

HM Includes measurement of the following elements:

Al, As, Cd, Pb, Cr, Ni, Be, Hg, Mn, Fe, Cu, Zn, Sb, V.

Note: HM in PM₁₀ and in PM_{2.5} are counted once

ZÚ only aggreg.24h data: CO Praha - 1 measurement, ozone Ústí nad Labem region - 4 measurements

Tab. mer5 Total number of monitoring localities with special measurements, manual methods, based on the owner, Czech Republic, 2005

Zone / agglomeration	VOC		POPs		PM _{2.5}	NH ₃	SNO ₃ ⁻ SNH ₄ ⁺ SO ₄	CS ₂	H ₂ S
	CHMI	ZÚ	CHMI	ZÚ	CHMI	ZÚ	CHMI	ZÚ	ZÚ, FP (I)
Agglomeration Brno	1	–	1	1	–	–	–	–	–
Agglomeration Prague	2	1	2	1	2	–	1	–	–
Zone South Bohemian region	–	–	1	–	–	–	–	–	–
Zone South Moravian region	–	–	–	–	–	–	–	–	–
Zone Karlovy Vary region	1	1	1	–	–	–	–	–	–
Zone Hradec Králové region	–	1	1	1	3	–	–	–	–
Zone Liberec region	–	–	1	–	1	–	–	–	–
Agglomeration Moravian-Silesian region	1	2	3	2	2	–	–	–	–
Zone Olomouc region	–	–	1	–	–	–	–	–	–
Zone Pardubice	–	–	1	–	2	–	1	–	–
Zone Plzeň region	–	–	1	1	–	–	–	–	–
Zone Central Bohemian region	–	–	1	–	–	–	–	–	–
Zone Ústí nad Labem region	1	1	4	1	2	1	–	2	5
Zone Vysočina region	2	–	1	1	1	–	1	–	–
Zone Zlín region	–	–	1	–	–	–	–	–	–
Total	8	6	20	8	13	1	3	2	5
Total	14		28		13	1	3	2	5

Explanatory notes:

VOC Includes measurement of separately analyzed hydrocarbons: benzene, methane, ethane, ethene, propane, propene, i-butane, n-butane, acetylene, sum of butene, i-pentane, n-pentane, sum of pentene, methyl cyclopentane, n-hexane, cyclohexane, n-heptane, isoprene, toluene, ethylbenzene, m,p-xylene, o-xylene, nonane, 2+3 methylpentane, 2+3 methylhexane, cyclopentane, 2,2-dimethylbutane, 2,3 dimethylbutane, 2+3 methylheptane, i-octane, n-octane.

POPs Includes measurement of persistent organic pollutants: anthracene, acenaphthene, acenaphthylene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, benzo(b)fluorantene+benzo(k)fluorantene, chrysene, dibenzo(a,h)anthracene, phenanthrene, fluorene, fluoranthene, ideno(1,2,3-cd)pyrene, naphtalene, pyrene, alpha-HCH, beta-HCH, delta-HCH, gamma-HCH, hexachlorbenzene, PAHs, PCP28, PCB52, PCB101, PCB118, PCB138, PCB153, PCB180, p,p'-DDD, p,p'-DDE, p,p'-DDT.

Note: SO₄ not in Prague; POPs - CHMI only BaP.
At certain stations the above measuring programme may be limited.